

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 09/402,0930  
Source: IFW/b  
Date Processed by STIC: 5/23/06

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 05/23/2006

PATENT APPLICATION: US/09/402,093D

TIME: 09:48:19

Input Set : A:\47259373.APP

Output Set: N:\CRF4\05232006\I402093D.raw

3 <110> APPLICANT: OHSUYE, KAZUHIRO  
 4 YABUTA, MASAYUKI  
 5 SUZUKI, YUJI  
 7 <120> TITLE OF INVENTION: PROCESS FOR PRODUCING PEPTIDES USING A HELPER PEPTIDE  
 9 <130> FILE REFERENCE: 47259.0373-US  
 11 <140> CURRENT APPLICATION NUMBER: 09/402,093D  
 12 <141> CURRENT FILING DATE: 1999-09-29  
 14 <150> PRIOR APPLICATION NUMBER: PCT/JP99/00406  
 15 <151> PRIOR FILING DATE: 1999-01-29  
 17 <150> PRIOR APPLICATION NUMBER: JP 10-32272  
 18 <151> PRIOR FILING DATE: 1998-01-30  
 20 <160> NUMBER OF SEQ ID NOS: 72  
 22 <170> SOFTWARE: PatentIn Ver. 3.3  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 4  
 26 <212> TYPE: PRT  
 27 <213> ORGANISM: Artificial Sequence  
 29 <220> FEATURE:  
 30 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 31 peptide  
 33 <400> SEQUENCE: 1  
 34 Asp Asp Asp Lys  
 35 1  
 38 <210> SEQ ID NO: 2  
 39 <211> LENGTH: 4  
 40 <212> TYPE: PRT  
 41 <213> ORGANISM: Artificial Sequence  
 43 <220> FEATURE:  
 44 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 45 peptide  
 47 <400> SEQUENCE: 2  
 48 Ile Glu Gly Arg  
 49 1  
 52 <210> SEQ ID NO: 3  
 53 <211> LENGTH: 7  
 54 <212> TYPE: PRT  
 55 <213> ORGANISM: Artificial Sequence  
 57 <220> FEATURE:  
 58 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 59 peptide  
 61 <400> SEQUENCE: 3  
 62 Pro Phe His Leu Leu Val Tyr  
 63 1 5

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66 <210> SEQ ID NO: 4
67 <211> LENGTH: 6
68 <212> TYPE: PRT
69 <213> ORGANISM: Artificial Sequence
71 <220> FEATURE:
72 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
73     peptide
75 <400> SEQUENCE: 4
76 Val Asp Asp Asp Asp Lys
77   1             5
80 <210> SEQ ID NO: 5
81 <211> LENGTH: 6
82 <212> TYPE: PRT
83 <213> ORGANISM: Artificial Sequence
85 <220> FEATURE:
86 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
87     peptide
89 <400> SEQUENCE: 5
90 Gly Cys His His His His
91   1             5
94 <210> SEQ ID NO: 6
95 <211> LENGTH: 10
96 <212> TYPE: PRT
97 <213> ORGANISM: Artificial Sequence
99 <220> FEATURE:
100 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
101     peptide
103 <400> SEQUENCE: 6
104 Pro Gly Gly Arg Pro Ser Arg His Lys Arg
105   1             5             10
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 10
110 <212> TYPE: PRT
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
115     peptide
117 <400> SEQUENCE: 7
118 His Arg His Lys Arg Ser His His His His
119   1             5             10
122 <210> SEQ ID NO: 8
123 <211> LENGTH: 5
124 <212> TYPE: PRT
125 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
129     peptide
131 <400> SEQUENCE: 8
132 Ser Asp His Lys Arg

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133      1              5
136 <210> SEQ ID NO: 9
137 <211> LENGTH: 23
138 <212> TYPE: PRT
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
143     peptide
145 <400> SEQUENCE: 9
146 Gln Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Arg His His
147   1              5              10              15
149 Arg Trp Gly Arg Ser Gly Ser
150           20
153 <210> SEQ ID NO: 10
154 <211> LENGTH: 20
155 <212> TYPE: PRT
156 <213> ORGANISM: Artificial Sequence
158 <220> FEATURE:
159 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
160     peptide
162 <400> SEQUENCE: 10
163 Gln Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Arg His His
164   1              5              10              15
166 Gly Ser Gly Ser
167           20
170 <210> SEQ ID NO: 11
171 <211> LENGTH: 69
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
177     coding nucleotide
179 <220> FEATURE:
180 <221> NAME/KEY: CDS
181 <222> LOCATION: (1)..(69)
183 <400> SEQUENCE: 11
184 cag atg cat ggt tat gac gcg gag ctc cgg ctg tat cgc cgt cat cac   48
185 Gln Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Arg His His
186   1              5              10              15
188 cgg tgg ggt cgt tcc gga tcc   69
189 Arg Trp Gly Arg Ser Gly Ser
190           20
193 <210> SEQ ID NO: 12
194 <211> LENGTH: 23
195 <212> TYPE: PRT
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
200     peptide

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202 <400> SEQUENCE: 12
203 Gln Met His Gly Tyr Asp Ala Glu Leu Arg Leu Tyr Arg Arg His His
204   1           5           10           15
206 Arg Trp Gly Arg Ser Gly Ser
207           20
211 <210> SEQ ID NO: 13
212 <211> LENGTH: 47
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
218     oligonucleotide
220 <400> SEQUENCE: 13
221 tggttatgac gcggagctcc gcctgtatcg ccgtcatcac gggtccg           47
224 <210> SEQ ID NO: 14
225 <211> LENGTH: 55
226 <212> TYPE: DNA
227 <213> ORGANISM: Artificial Sequence
229 <220> FEATURE:
230 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
231     oligonucleotide
233 <400> SEQUENCE: 14
234 gatccggaac cgtgatgacg gcgatacagg cggagctccg cgtcataacc atgca           55
237 <210> SEQ ID NO: 15
238 <211> LENGTH: 24
239 <212> TYPE: DNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
244     primer
246 <400> SEQUENCE: 15
247 gactcagatc ttcctgaggc cgat           24
250 <210> SEQ ID NO: 16
251 <211> LENGTH: 36
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
257     primer
259 <400> SEQUENCE: 16
260 aaaggtaacct tccgcatgcc gcggatgtcg agaagg           36
263 <210> SEQ ID NO: 17
264 <211> LENGTH: 20
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
270     primer
272 <400> SEQUENCE: 17

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## RAW SEQUENCE LISTING

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PATENT APPLICATION: US/09/402,093D

TIME: 09:48:19

Input Set : A:\47259373.APP

Output Set: N:\CRF4\05232006\I402093D.raw

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273 aggccaggaa ccgtaaaaag                20
276 <210> SEQ ID NO: 18
277 <211> LENGTH: 29
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial Sequence
281 <220> FEATURE:
282 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
283     primer
285 <400> SEQUENCE: 18
286 aaaatgcatc gcatcgtaac cgtgcatct                29
289 <210> SEQ ID NO: 19
290 <211> LENGTH: 627
291 <212> TYPE: DNA
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
296     coding nucleotide
298 <220> FEATURE:
299 <221> NAME/KEY: CDS
300 <222> LOCATION: (82)..(543)
302 <400> SEQUENCE: 19
303 cccaggcttt acactttatg cttccggctc gtatgttggtg tggaattgtg agcggataac 60
305 aatttcacac aggaaacagc t atg acc atg att acg gat tca ctg gcc gtc 111
306                               Met Thr Met Ile Thr Asp Ser Leu Ala Val
307                               1             5             10
309 gtt tta caa cgt aaa gac tgg gat aac cct ggc gtt acc caa ctt aat 159
310 Val Leu Gln Arg Lys Asp Trp Asp Asn Pro Gly Val Thr Gln Leu Asn
311                               15             20             25
313 cgc ctt gca gca cat ccc cct ttc gcc agc tgg cgt aat agc gac gac 207
314 Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp
315                               30             35             40
317 gcc cgc acc gat cgc cct tcc caa cag ttg cgc agc ctg aat ggc gaa 255
318 Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu
319                               45             50             55
321 tgg cgc ttt gcc tgg ttt ccg gca cca gaa gcg gtg ccg gca agc ttg 303
322 Trp Arg Phe Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Ala Ser Leu
323                               60             65             70
325 ctg gag tca gat ctt cct gag gcc gat act gtc gtc gtc ccc tca aac 351
326 Leu Glu Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser Asn
327 75                               80             85             90
329 tgg cag atg cac ggt tac gat gcg atg cat ggt tat gac gcg gag ctc 399
330 Trp Gln Met His Gly Tyr Asp Ala Met His Gly Tyr Asp Ala Glu Leu
331                               95             100            105
333 cgc ctg tat cgc cgt cat cac ggt tcc gga tcc cct tct cga cat ccg 447
334 Arg Leu Tyr Arg Arg His His Gly Ser Gly Ser Pro Ser Arg His Pro
335                               110            115            120
337 cgg cat gcg gaa ggt acc ttt acc agc gat gtg agc tcg tat ctg gaa 495
338 Arg His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu
339                               125            130            135

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 05/23/2006  
PATENT APPLICATION: US/09/402,093D      TIME: 09:48:20

Input Set : A:\47259373.APP  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:41; Xaa Pos. 2  
Seq#:42; Xaa Pos. 2  
Seq#:49; Xaa Pos. 2  
Seq#:50; Xaa Pos. 2  
Seq#:51; Xaa Pos. 2  
Seq#:52; Xaa Pos. 2  
Seq#:53; Xaa Pos. 2  
Seq#:54; Xaa Pos. 2  
Seq#:61; Xaa Pos. 2  
Seq#:62; Xaa Pos. 2  
Seq#:63; Xaa Pos. 2  
Seq#:64; Xaa Pos. 2  
Seq#:65; Xaa Pos. 2  
Seq#:66; Xaa Pos. 2  
Seq#:69; Xaa Pos. 2  
Seq#:70; Xaa Pos. 2

## VERIFICATION SUMMARY

DATE: 05/23/2006

PATENT APPLICATION: US/09/402,093D

TIME: 09:48:20

Input Set : A:\47259373.APP

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L:852 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0  
L:874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0  
L:998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0  
L:1020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0  
L:1042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0  
L:1064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
L:1086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0  
L:1108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:0  
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0  
L:1254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0  
L:1276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0  
L:1298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0  
L:1320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0  
L:1342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0  
L:1398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0  
L:1420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0